

Patent Claims

1. A network element for a digital communications network, comprising

- a number of interface modules (23, 24),
- a first, active switching matrix (21), connected to the interface modules (23, 24), for switching paths between the interface modules,
- a second, redundant switching matrix (22), also connected to the interface modules (23, 24), and
- a controller (25) for detecting a fault condition of the active switching matrix (21) and for switching to the redundant switching matrix (22), which is then used as a new active switching matrix,

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that the interface modules (23, 24) are divided into two groups, and that each of the two switching matrices (21, 22) is combined with a respective one of the groups of interface modules (23, 24) to form two separate units, which are interconnected by internal links (34), whereby the units can be installed in two separate rooms (31, 32).

2. A network element as claimed in claim 1 wherein a respective one of the switching matrices and a respective one of the groups of interface modules are installed as a unit in a rack.

3. A network element as claimed in claim 1 wherein the interface modules (23, 24) are optical interface modules designed for the connection of optical fibers of a fiber-optic communications system.

a 4. A network element as claimed in claim 1 ~~or 3~~ wherein the internal links (34) are short-range optical links designed for a maximum fiber length of about 200 meters.

5. A network element as claimed in claim 1 wherein each of the two units is provided with its own clock supply, with one of the clock supplies at a time operating as an active clock supply and the other being available as a standby unit in the event of a failure.

6. A network element as claimed in claim 1 which comprises a second, redundant controller (26), wherein a respective one of the controllers (25, 26) is spatially associated with a respective one of the units, and wherein one of the controllers (25, 26) at a time operates as an active controller while the other is available as a standby unit in the event of a failure.